APPENDIX B

Potential Benefits and Drawbacks of Corridors as a Means of Connecting Fragmented Habitats

Benefits

Increase immigration, which could favorably increase species richness, as predicted by the theory of island biogeography; increase population sizes and decrease chances for extirpation (produces a "rescue effect") or reestablishes extirpated populations; prevent inbreeding depressions and maintain genetic variation within populations

Increases foraging areas for wide-range species

Provide escape cover for animals moving between fragmented habitats

Provide diversity for species requiring various cover types and successional stages

Provide refuges from large disturbances (a "fire escape")

Provide "greenbelts" in urban areas for recreation better scenery, improved land values, and other benefits Drawbacks

Increases in migration, which could aid in spread of diseases, weeds, and pests, exotic species, and other undesirable species into reserves and across the landscape affect genetic events (e.g., outbreeding depression)

Aid spread of abiotic disturbances, especially fire

Increase exposure of wildlife to hunters, poachers,

May favor some species and not others (e.g., riparian habitat may not serve as corridors for upland species

Expense, and conflicts with other conservation strategies

(Source: Bolen and Robinson, 1998)